

WHAT WE CLAIM IS:

1. An electron microscope for observing a surface or inside of a semiconductor wafer or a mask for exposing a semiconductor pattern for faults and/or foreign objects,  
5 comprising

a function of loading measurement data of coordinates or sizes of faults or objects which were observed by another wafer or mask inspecting apparatus, moving the field of view of the electron microscope to the area  
10 where said fault or object exists, and displaying the coordinates of faults or objects which were obtained by another wafer or mask inspecting apparatus, the field of view of the electron microscope and its vicinity,

a function of a pointing device switch which moves the field of view of the electron microscope to a  
15 position which is pointed to by a pointer on said display, and

a function of changing the display as said field of view moves.

20 2. An electron microscope in accordance with Claim 1, wherein the switch of said pointing device has a function to magnify or shrink the field of view of the electron microscope and its vicinity at any rate.

25 3. An electron microscope in accordance with Claim 1, further comprising a function which magnifies or shrinks said field of view of the electron microscope and its vicinity as the field of view moves on a screen displaying said field of view of the electron microscope

and its vicinity.

4. An electron microscope in accordance with Claim 1,  
further comprising a function which moves and displays  
the center coordinates of the field of view and its  
5 vicinity as said field of view moves.

5. An electron microscope in accordance with Claim 1,  
further comprising a function which displays shapes of  
faults on the screen displaying said field of view and a  
function which changes the display on the screen as the  
10 observing conditions of the electron microscope change.

6. An electron microscope in accordance with Claim 1,  
further comprising a function which displays coordinates  
of faults or objects obtained by said another wafer or  
mask inspecting apparatus and distances of the field of  
15 view of the electron microscope, a function which stores  
said distance values, and a function which relatively  
moves the field of view of the electron microscope by  
said stored distances.

7. An electron microscope in accordance with Claim 1,  
20 further comprising a function which displays an observed  
area and a non-observed area separately on the screen  
displaying said field of view and its vicinity, and a  
function which changes said display as the observing  
conditions of the electron microscope change.